



PATENT
0879-0310P

IN THE U.S. PATENT AND TRADEMARK OFFICE

Applicant: Satoshi OKAMOTO Conf.: 001743
Appl. No.: 09/833,649 Group: 2622
Filed: April 13, 2001 Examiner: Y. AGGARWAL
For: IMAGE DATA TRANSMITTING DEVICE AND METHOD

**DECLARATION OF PRIOR INVENTION IN A WTO MEMBER COUNTRY TO OVERCOME A
CITED PATENT PURSUANT TO 37 C.F.R. § 1.131**

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

I, the signer of the present declaration, hereby declare as follows:

1. That I am the sole inventor of the present application.
2. That I am presenting this declaration to establish completion of the invention of the present application in the United States, at a date prior to March 27, 2000, that is the effective date of the cited art, United States Patent 6,977,680 to Ichihara that was cited by the Examiner in the Official Action dated March 23, 2007, in the above-identified application.
3. That in order to establish the date of invention of this application prior to March 27, 2000, the following attached documents are submitted as evidence:
 - (a) Exhibit A: Twelve (12) pages of the invention description, in Japanese, that was prepared at least as early as March 2, 2000, together with a translation thereof (dates have been redacted).
4. That I invented the invention recited in the claims of the present application and provided the above Japanese Exhibit to my company's Patent Department at least as early as

March 27, 2000 (the effective date of Ichihara). That since the present application was filed in Japan on April 14, 2000, and since I was working with my Japanese Patent Attorney during the operative period to finalize this application for filing, there has been diligence during the period from the preparation of the invention description until April 14, 2000, the date my application was first filed internationally. Evidence of diligence is attached hereto as follows:

- (a) Exhibit B: Two (2) pages, Japanese language with English translation, of correspondence dated March 2, 2000, instructing attorney to meet with inventor to discuss invention disclosure;
- (b) Exhibit C: Two (2) pages, Japanese language with English translation, of correspondence dated March 8, 2000, instructing attorney to prepare draft patent application; and
- (c) Exhibit D: Two (2) pages, Japanese language with English translation, of correspondence dated April 11, 2000, instructing my attorney to file my patent application.

As can be seen from these attached documents, my attorney was instructed to meet with me to discuss and prepare a draft patent application on March 2, 2000. Between March 2, 2000, and April 14, 2000, I communicated with my attorney on several occasions to discuss the invention, reviewed the draft application for completeness and accuracy, and authorized its filing.

As such, the invention in this application was made at least by March 2, 2000, which is a date earlier than the effective date of the Ichihara reference and there was diligence from just prior to the effective date of Ichihara, namely March 27, 2000, through the filing date of the priority application, namely April 14, 2000.

I hereby declare that all statements made herein of my own knowledge are true or believed to be true; that all statements made on information and belief are believed to be true; and further that these statements are punishable by fine or imprisonment or both, under Section 1001 of Title 18 of the United States Code and that willful false statements may jeopardize the validity of the application or any patent issued thereon.

5. Signature:

Inventor:

Full name of first inventor: Satoshi OKAMOTO

Inventor's signature Satoshi Okamoto

Date July 6, 2007

Citizenship: Japanese

Residence: 11-46, Senzui 3-chome, Asaka-shi, Saitama, Japan

Post Office Address: 11-46, Senzui 3-chome, Asaka-shi, Saitama, Japan

SHNoH11-081 01-2560

To: Intellectual property division

Invention Disclosure Document

Author: Office Densetsu SF1, Name Satoshi Okamoto

1. Title of the invention

Image Transmission Control Method For Digital Still Camera

It may be limited to DSC

2. Technical field of the invention

3. Conventional art and their disadvantages (copies are attached for patents or documents of other companies)

| Cited reference | Number, etc. | Applicant, etc. | Remarks |
|-----------------|---------------------------------------|-----------------|---------|
| 1 | Japanese Patent Laid-Open No. 9-37125 | Canon Inc. | |
| 2 | | | |
| 3 | | | |
| 4 | | | |

(Differences between the present invention and the conventional art)

The conventional art assumes that when an image is transmitted on an imaging side (a digital still camera and the like), all shot images are transmitted. The present invention has a storage medium such as a memory card and performs the transmission if capacity of the memory card has become insufficient, which can be listed as a difference. As an advantage of having the memory card, it is conceivable that, if the image has been transmitted to a specific server and the like, a printer having a slot for the memory card and the like cannot be instantaneously used. Therefore, in the present invention, as the images after being shot, there are images to be saved in the memory card and images to be transmitted and saved in the server. Moreover, attached information (thumbnails and the like) on the respective transmitted images has been saved on the camera side so that the transmitted images can be checked also from the camera side, a user can

check both of the transmitted images and other images, which is a major difference between the present invention and the conventional art.

They can be distinguished by displaying them at OSD.
It can be seen on which side a main image exists.

4. Problems to be solved by the invention

In a digital still camera market with yearly increasing pixel count, the most concerned issue is the capacity of the memory (storage medium). Therefore, the present invention proposes that, without depending only on the storage medium, an image signal is transmitted to a specific server via a network such as the Internet so that the memory capacity may not be limited. Although Japanese Patent Laid-Open No. 9-37125 and the like also describe such an invention, the present invention does not transmit all shot images and also has the storage medium similarly to a conventional digital camera. And only if an image beyond the capacity of the storage medium is shot, the transmission to the server is performed via the network.

SUB Select medium <-> transmit (manually or automatically)

(1) Keep the thumbnail in the medium. If the transmission has been performed.

SUB Adds an identifier to a transmitted file. Transmitted mark

SUB Create transmission files and transmit them collectively (transmit an order file, a file name, the number of images)

SUB: Write transmission information in TAG

SUB: Create the transmission files

SUB: Transmitted with characters
"Transmitted"

SUB: Display with a mark

SUB: Display for indicating a transmission destination

SUB: Display for indicating a transmission receiving side

 
Server mark
Bordering
Icon color
White frame,
black frame,
arrow
Specification
by Mr.
Miyake

Collectively transmit

- Establish communication
- Select
- Transmit
- End

It is cumbersome to set them for each image.

Batch transmission is also possible. At this time, a mark indicating that it has been selected is displayed on a display.

Frame color and the like

It is not possible to receive them from the server and reproduce a main image.



When the reproduction of the main image of  is performed, the thumbnail may be displayed.

The following point can be listed as a reason thereof. In the digital camera market today, according to the increasing pixel count, not only demands from PC users, but also demands from non-PC users for using the image directly in the printer through the storage medium to print it have increased. Therefore, if all images on the camera side have been transmitted, the printing is eventually performed by using a personal computer and the like, and the non-PC users cannot easily use the printer at home to perform the printing.

Moreover, the attached information (thumbnails and the like) on the images has been kept on the camera side so that the transmitted images can also be checked. This attached information is similarly included also with respect to the images on the camera side, and in the attached information, it can be seen whether the image is the transmitted image or the image within the storage medium. And as necessary, also with respect to the image which has been transmitted once, the image can also be pulled back from the server to the camera to the extent that the memory capacity on the camera side permits. By doing so, it is conceivable that the server and the medium can be advantageously utilized depending on the capacity of the storage medium in hand or an application of the image.

5. Means for solving the problems

- Means for transmitting an image signal through a network such as the Internet.

6. (a) Example

An example in the present invention is shown as a flowchart in FIG. 1.

Moreover, an example of displaying attached information (thumbnails) on images on a liquid crystal screen is shown in FIG. 2.

- (b) Other examples
- (c) Other conceivable applications

7. (a) Advantages of the invention

- Since a server of a transmission destination is used in conjunction with a storage medium of a camera, limitation of a memory can be eliminated, and at the same time, an application of utilizing only the storage medium not via a personal computer can also be supported.
- Since the attached information (thumbnails and the like) on the images has been kept on the camera side, the images can be checked even after they have been transmitted.

(b) Unexpected advantages of the invention

(c) Advantages specific to the examples

8. (a) Claims

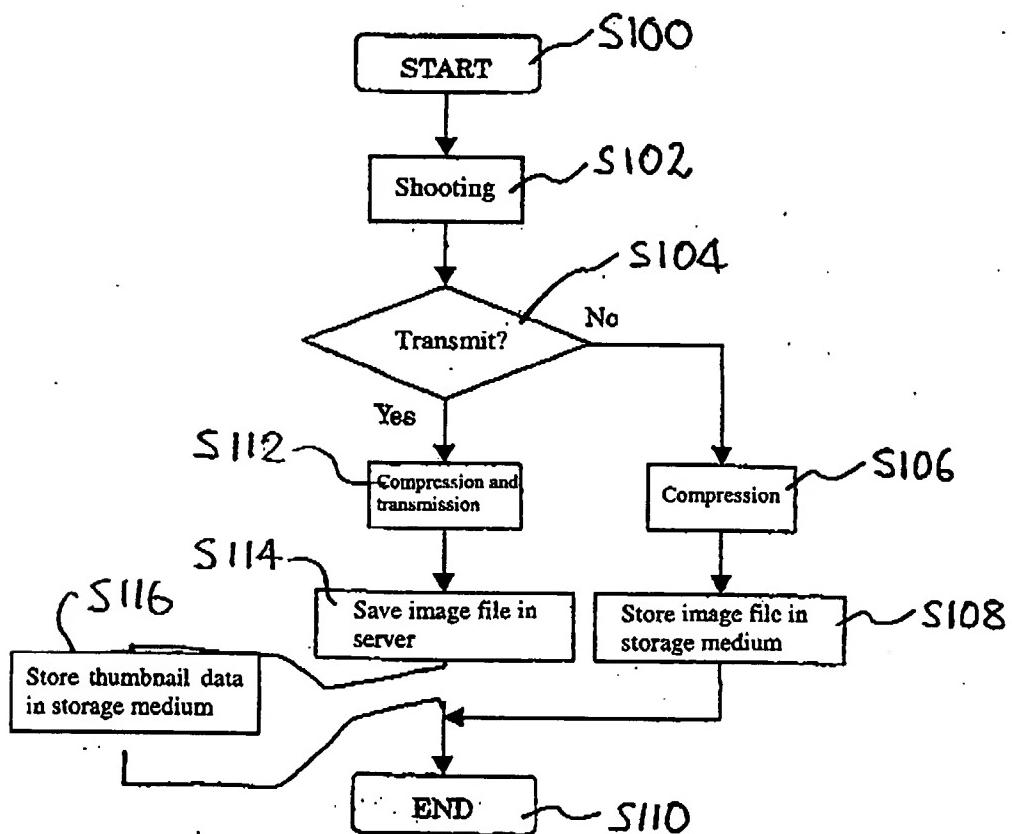
- A device for transmitting an image signal to a server and enabling writing data in a storage medium.

(b) Step-by-step description with respect to respective technical means for defining the claims

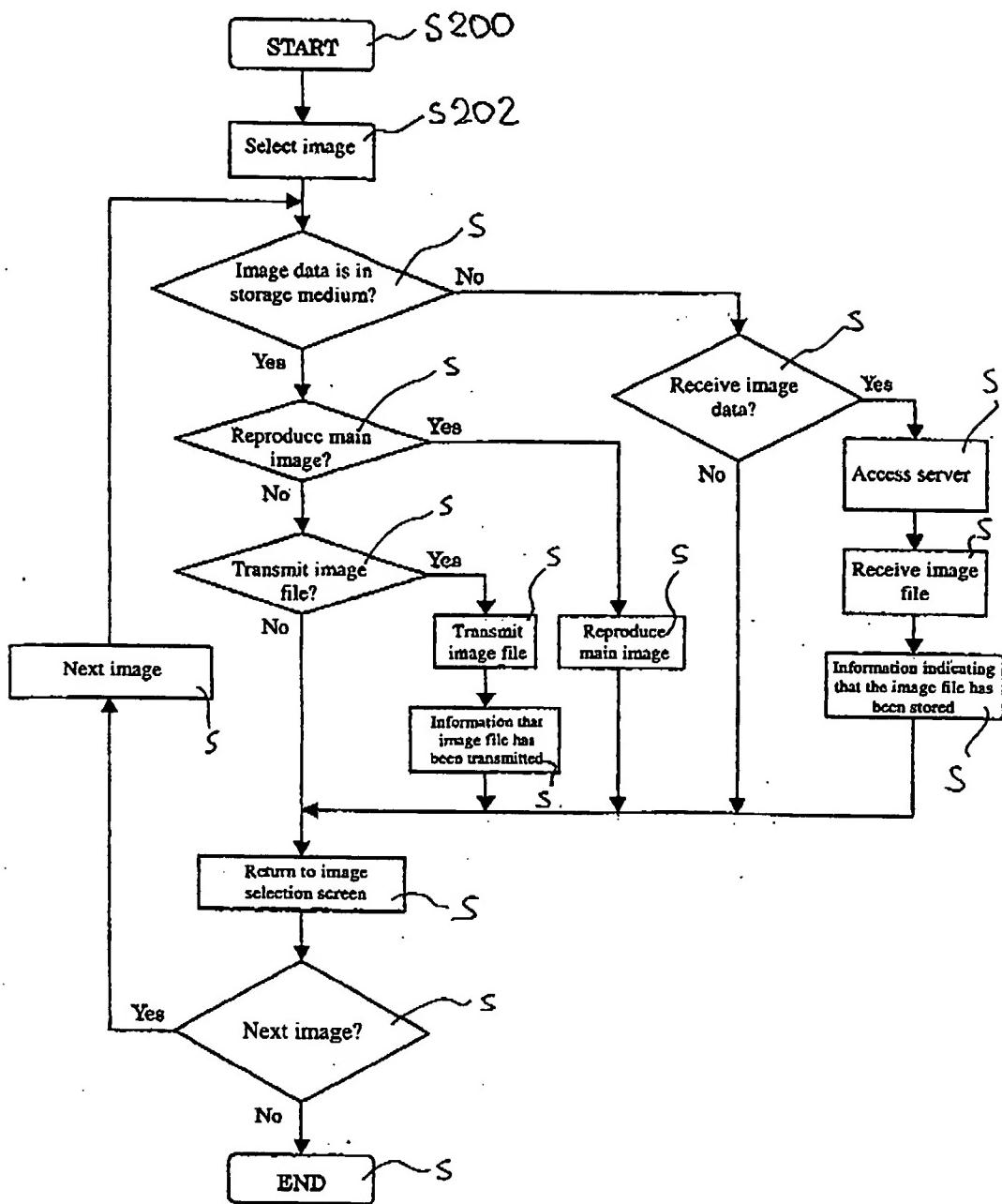
9. Brief description of the drawings

<FIG. 1>

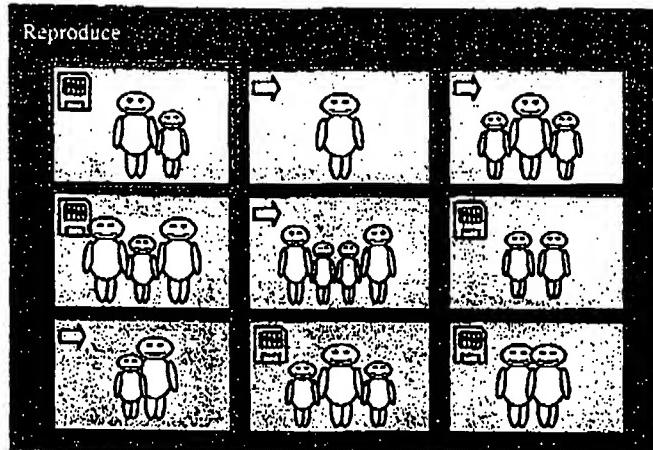
In the case of performing transmission after shooting



In the case of performing the transmission from a reproducing system



<FIG. 2>



→ Transmitted mark

█ : Store in medium
Media mark

Orange frame : Selected image

DSC creates

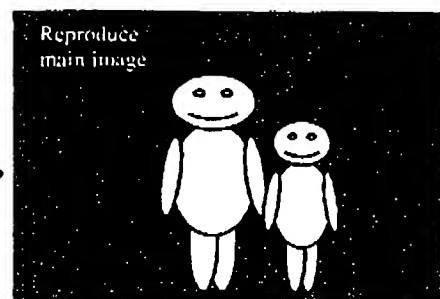
Read a transmitted file such as D-POF
and display it

Write whether the main image exists or
not, in TAG (transmitted, untransmitted)

Select



Return



3/31/1994

知財部 殿

SHNoHII-081

01-2560

発明開示書

作成者：職場 電設 SF1 氏名 國本 訓

1. 発明の名称

デジタルスチルカメラの画像転送制御方法 DSCIに準定してよい

2. 発明の技術分野

3. 従来技術とその欠点(他社特許、文献についてはコピー添付)

| 引用例 | 番号等 | 出願人等 | 備考 |
|-----|-------------|----------|----|
| 1 | 特開平 9-37125 | キャノン株式会社 | |
| 2 | | | |
| 3 | | | |
| 4 | | | |

(本発明と従来技術との相違)

従来技術は、撮像側（デジタルスチルカメラなど）での画像の転送を行う際に、撮影した全ての画像を転送することを前提としている。本発明では、メモリカードなどの記憶媒体を有し、そのメモリカードの容量が足りなくなった場合に転送を行うことが相違点として挙げられる。メモリカードを有する利点として、画像を特定のサーバなどに転送してしまうと、メモリカードのスロットを持つプリンタなどを瞬時に利用することができなくなってしまう、ということが考えられる。従って、本発明では撮影後の画像として、メモリカード内に保存する画像と転送してサーバに保存する画像が存在する。また、カメラ側からでも転送した画像が確認できる様に、転送したそれぞれの画像の付属情報（サムネールなど）をカメラ側で保存しておくことで、転送した画像に関するもうそうでないものでもユーザーが確認できる、という点が従来技術との大きな違いである。

4. 発明が解決しようとする課題

年々高画素化されているデジタルスチルカメラ市場において、最も懸念される点はメモリ（記録メディア）の容量である。そこで本発明では、記録メディアだけに依存せず、インターネットなどのネットワークを介して、ある特定のサーバに画像信号を転送し、メモリ容量が制限されないようすることを掲言するものである。このとき、発明によ

- ✓ SUB X^{アリ} → 転送と選択子 (人口負数)
 - ✓ ① サンプルを X^{アリ} のこす。転送法場合に。
 - ✓ SUB 転送法子化に該当子を付ける圖 求逆? ⇨
 - ✓ SUB 転送法子化を除く(これまで転送法子化方法名 転送法子化)

ある。このような説明について

- ✓ SUB: TAGI: 乾燥機器をかく 2 ④.ベニン
- SUB: 乾燥アリルをかく 747017 } ミヤシタ
- ✓ SUB: たて乾燥機 “乾燥” 747017 } ミヤシタ
- ✓ SUB: 紙机でかく。 “かく、かくし、かく” 747017 } ミヤシタ
- ✓ SUB: 乾燥毛と干毛器。 546
- ✓ SUB: 乾燥器をかく。

おめでたす

- ・ 退会 リツカイ 画像例: おめでたすこの誕生日に記念マークを表示する
- ・ 還款 ルカン
- ・ 転送 ハンズル
- ・ 終了 ハラダス

次回もおめでたす

は特開平 9-37125 などでも述べられているが、本発明では撮影した画像全てを転送するのではなく、従来のデジタルカメラと同様、記録メディアも有する。そして、その記録メディアの容量を越える画像を撮影する場合に限り、ネットワークを介してサーバへの転送を行う。

その理由としては次のような点が挙げられる。今日のデジタルカメラ市場は高画素化に伴い、パソコンユーザーのみならず、記録メディアを通じて直接プリンターに用いてプリントするという非パソコンユーザーの需要も増えてきている。そのため、カメラ側の画像を全て転送してしまうと、結局パソコンなどを利用してプリントすることになり、非パソコンユーザーには、手軽に自宅のプリンターを用いてプリントすることができなくなってしまう。

またカメラ側に、画像の付属情報（サムネールなど）を残しておくことで、転送後の画像についても確認することができるようになる。この付属情報はカメラ側の画像に関しても同様に持っていて、その付属情報には転送した画像であるか、記録メディア内のものであるかが分かるようしておく。そして、必要に応じては、一旦転送した画像についてもカメラ側のメモリ容量の許す限り、サーバからカメラに画像を引き戻すこともできる。そうすることで、手持ちの記録メディアの容量や画像の用途に応じて、サーバとメディアをうまく利用することができると考えられる。

5. 課題を解決するための手段

- 画像信号をインターネットなどのネットワークを通じて転送するための手段

6. (a) 実施例

本発明における実施例をフローチャートとして図1に示す。

また画像の付属情報（サムネール）を液晶画面に表示する例を図 3 に示す。

- (b) その他の実施例
 - (c) 考えられる他の用途

7. (a) 発明の効果

- 転送先のサーバとカメラの記録メディアとを併用させることで、メモリの制限をなくすと同時に、パソコンを介さず記録メディアのみを利用する用途にも対応できる。
 - カメラ側に画像の付属情報（サムネールなど）を残しておくことで、画像を転送した後でも確認することができる。

- (b) 発明の予期せざる効果

(c) 実地例に特有の効果

8. (a) 特許請求の範囲

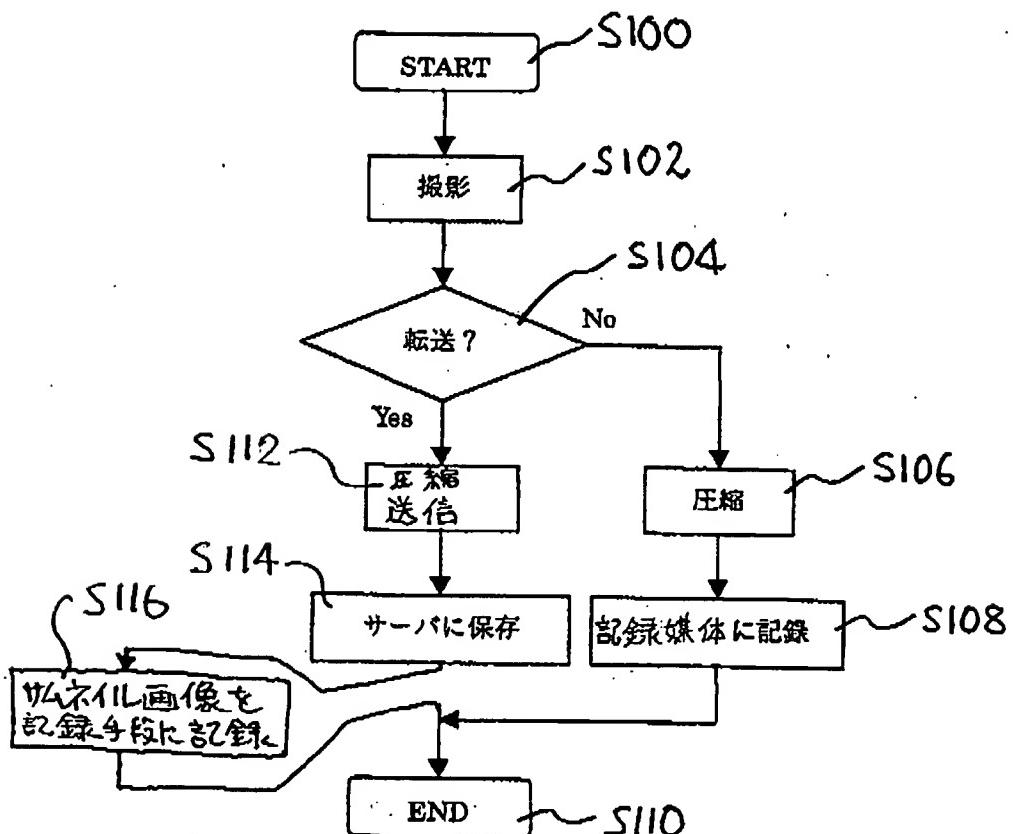
- 画像信号をサーバに転送し、また記録メディアへのデータの書き込みを可能とする装置。

(b) 特許請求の範囲を規定する各技術的手段に関する段階的記載

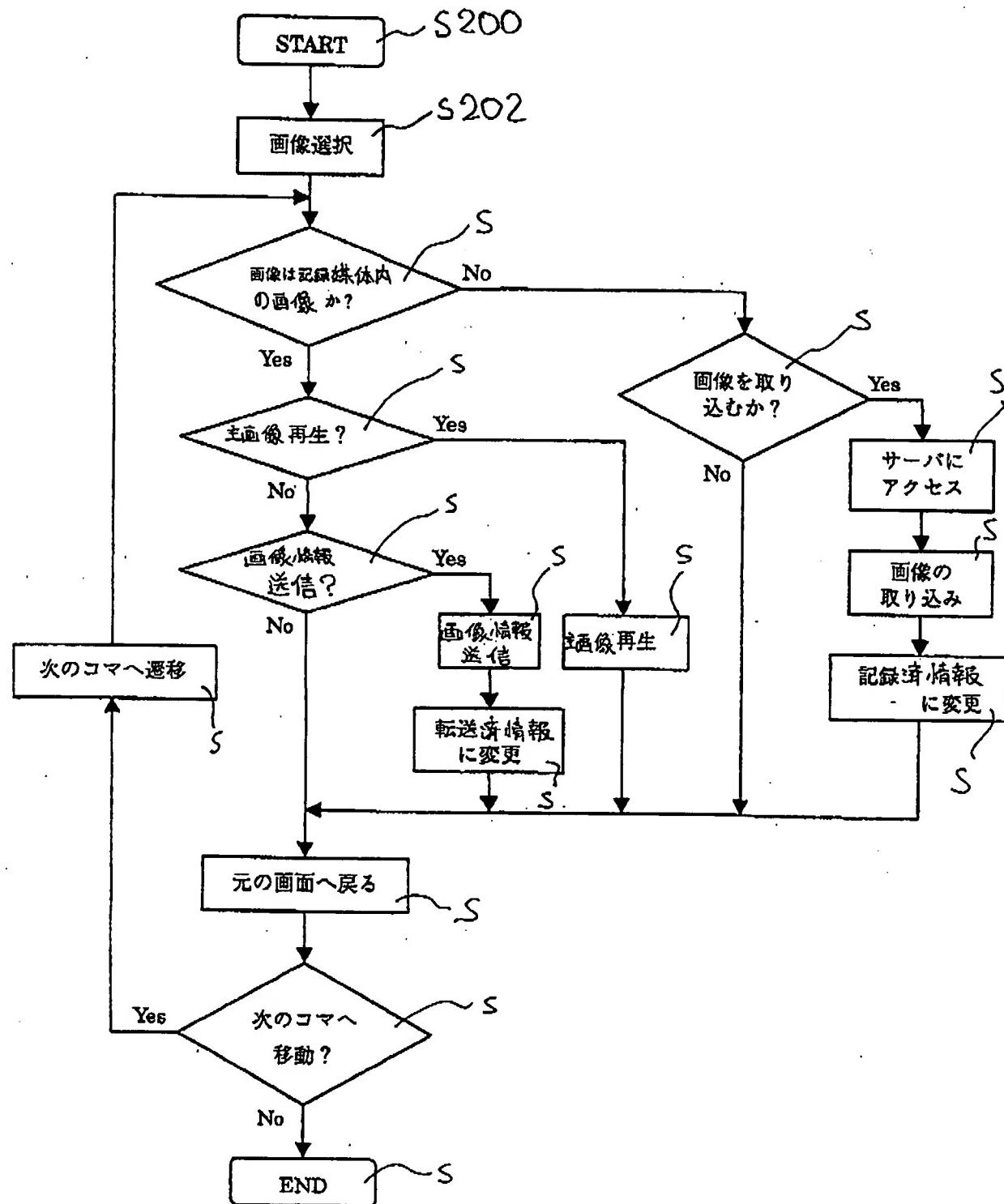
9. 図面の簡単な説明

<図1>

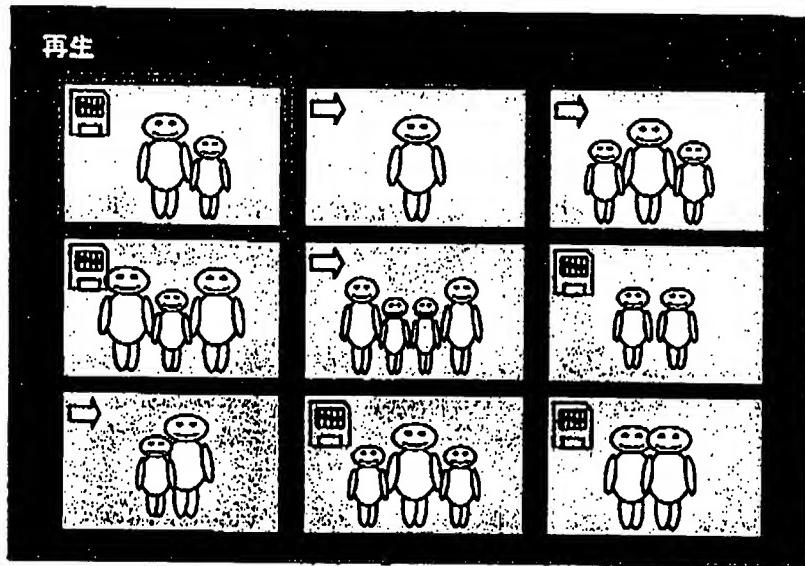
撮影後 転送を行う場合



再生系から転送を行う場合



<図2>



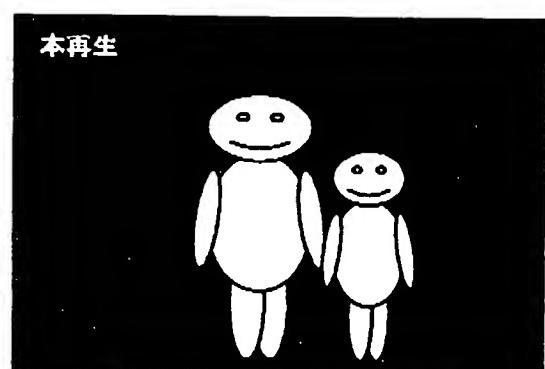
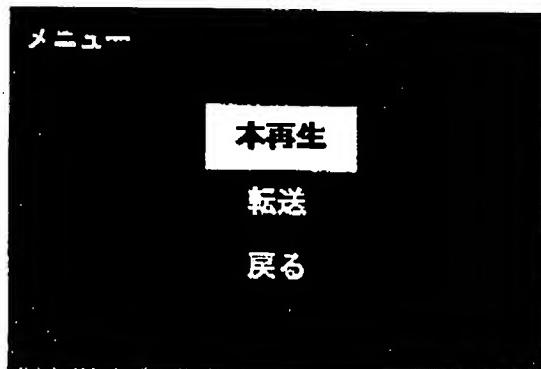
⇒ 転送 2/2

■ メディアに記録
Xマーク

オレンジ枠 : 選択画像

選択
戻る

} DSCが作成され
D-POFなどの転送用ファイルを読み取
れる
※直角のみでしか
TAGに書く(転送用)



FAX

00/03/02

To: Matsuura International Patent Office
Mr. Haraguchi
TEL 03-3340-5181
FAX 03-3340-5186

Fuji Photo Film Co., Ltd.
Intellectual property division (Tokyo) Yasuhiro Shinkai
TEL 03-3406-9690
FAX 03-3406-2171
E-mail shinkai@tokyo.fujifilm.co.jp

Dear Sirs:

It is our pleasure that your firm prospers more than ever.

I would like to ask you to have a meeting for applications on Friday, March 3, 2000.
Therefore, I have sent you disclosure documents as follow, so I would like to ask you to check and receive them.

Sincerely yours,

Noto

Meeting for the disclosure documents
Date and time: March 3 (Fri) 13:00-17:00
Place: Asaken H-Wing 3F, Third meeting room

| Inventor | Contents | Approximate time | |
|-----------------|--|------------------|------------|
| [REDACTED] | [REDACTED] | [REDACTED] | [REDACTED] |
| [REDACTED] | [REDACTED] | [REDACTED] | [REDACTED] |
| Satoshi Okamoto | Image transmission control method for digital still camera | 16:00-17:00 | 01-2560 |

The disclosure documents of Shigyou and Sugawara have been already sent to you.

End

ファックス

松浦国際特許事務所

00/03/02

原口 駿

TEL 03-3340-5181

FAX 03-3340-5186

富士写真フィルム株式会社

知的財産部(東京) 新貝 安浩

TEL 03 (3406) 9690

FAX 03 (3406) 2171

E-mail shinkai@tokyo.fujifilm.co.jp

拝啓 貴所ますますご隆盛のこととお慶び申し上げます。

平成12年3月3日金曜日に出願打ち合わせをお願いいたします。

つきましては、開示書をご送信いたしましたので、宜しくご査収の程お願い申し上げます。

敬具

記

開示書打合せ

日時：3月3日(金) 13:00-17:00

場所：朝研 H棟 3F 第三会議室

発明者

内容

およその時刻

○ 岡本 訓 デジタルスチルカメラの画像転送制御方法 16:00-17:00 01-2560

執行と菅原の開示書は送付済

以上

 FUJIFILM
East Imaging & Information

01.3.-3
原
岡 本 訓



富士写真フィルム株式会社
〒351-8585 神奈川県横浜市泉木3丁目13番45号
朝霞技術開発センター内
TEL(048)462-6861 FAX(048)462-6994
E-mail:satoshi@den.fujifilm.co.jp

DIGITAL IMAGING

SERVICE

 FUJIFILM

To: Matsuura International Patent Office

FF Order Number: 10012560

Cost Code: 01-11

Request for creating a specification for a patent or a utility model in Japan

March 8, 2000

Fuji Photo Film Co., Ltd.

Intellectual property division

Chief Engineer, Jun Nakamura 

Nakamura

We request you to create a specification as follows:

Category: Patent

Name:

Jitoku Number: 012560

Person in charge at the Intellectual property division: (Denkou) Shinkai

Person in charge of communication: Densetsu SF, Satoshi Okamoto

Preferred person in charge of your firm: Mr. Haraguchi

Level of importance: Normal

Level of urgency: Normal

Due date

Due date for draft of specification: Until April 03, 2000

Preferred application date: Until April 13, 2000

Final due date for application: Until April 16, 2000

Domestic Priority:

Indication of previous application:

Information: Fee rank is A.

Notice: If there is any problem with the above terms (the due dates and the persons in charge), please contact the person in charge at the Intellectual property division to adjust the terms before submitting the acknowledgment of order.

松浦国際特許事務所 殿

FF 発注番号 : 10012560
経費コード : 01-11

国内 特・実 明細書作成依頼書

平成 12 年 3 月 8 日
富士写真フィルム株式会社
知的財産部
主任技師 中村 淳

下記の明細書の作成を依頼いたします。



種 別 : 特許

名 称 :

事特番号 : 012560

知的財産部担当者 : (電光) 新貝 訓
連絡担当者 : 電設 S F 岡本 訓

貴所希望担当者 : 原口 殿

重要度 : 普通

緊急度 : 定常

納 期

明細書案納品日 : 平成 12 年 04 月 03 日まで
出願希望日 : 平成 12 年 04 月 13 日まで
出願最終期限日 : 平成 12 年 04 月 16 日まで

国内優先権 :

先の出願の表示 :

連絡欄 : 手数料はランク A です

お願い : 上記条件 (納期、担当者) に問題がある場合は、請書をご提出
いただく前に知的財産部担当者へ連絡し、調整して下さい。

To: Matsuura International Patent Office

Request for a patent or a utility model in Japan

April 11, 2000

Fuji Photo Film Co., Ltd.

Intellectual property division

Technical Editor, Mikio Tomizuka



Tomizuka

We request you to file an application in the JPO as follows:

Category: Patent

Jitoku Number: 012560

Person in charge at the Intellectual property division: Shinkai

Person in charge of communication: Densetsu SF, Satoshi Okamoto

Preferred application date: Until April 17, 2000

Final due date for application: Until April 20, 2000

Number of claims: 27

Domestic Priority:

Indication of previous application:

Co-Applicant: None

Information: IPC: H04N 5/225

Name and Address of inventor(s) -----

OKAMOTO, Satoshi (Asaka)

国内特・実出願依頼書

2000年4月11日
富士写真フイルム株式会社
富知的財産部主査
電 訓
下記に關し特許庁への出願手続きを依頼いたします。

種別：特許出願

事特番号：012560

知的財産部担当者：新貝 S F 岡本 訓
連絡者

出願希望最終期限日：平成12年04月17日まで
出願希望最終期限日：平成12年04月20日まで

請求項の数：27

国内優先権の表示：
国先の出願

共同出願人：ナシ

連絡欄：IPC:H04N 5/225

発明・考案者氏名及び居所
岡本 訓 オカモト サトシ (朝霞)